



DR^x FIREGUARD

PREDICTIVE WILDFIRE RISK,
EVENT READINESS & SMART
RESTORATION



FIRE GUARD[®]

Reducing Wildfire Ignition Risk While
Minimizing Customer Disruption

DR^x FIREGUARD: THE FUTURE OF WILDFIRE OPERATIONS INTELLIGENCE

DR^x FireGuard integrates real-time fire-weather forecasts, historical outage/ignition data, GIS asset and vegetation layers, and asset-condition indicators to anticipate likely damage and ignition risk during critical fire-weather (e.g., NWS Red Flag Warning) and extreme wind events. It generates automated PSPS planning alerts, highlights circuits/segments most likely to cause ignition, and optimizes PSPS footprint to minimize customer impact, while maximizing risk reduction. The platform supports dynamic re-energization planning, projecting safe restoration windows and resource needs, and provides scenario analysis and transparent documentation to defend decisions with regulators and stakeholders. Built on the proven DR^x Weather Guard foundation, DR^x FireGuard extends those capabilities from storm response to wildfire risk mitigation and PSPS execution.



Smaller, Smarter PPS Footprints

Minimize unnecessary customer impact while maintaining safety.



Faster, More Confident PPS Decisions & Restorations

Decision support + re-energization forecasts reduce duration and uncertainty.



Targeted Field Operations

Prioritize patrols /inspections and restoration sequencing where risk is lowest and customer impact highest.



Regulatory Defensibility & Stakeholder Trust

Transparent analytics and auditable logic support regulatory expectations.



ISL ANALYTICS' INNOVATION LAB: SMART TOOLS FOR SMART COMPANIES

ISL Analytics develops software solutions and tools to help solve challenges, complementing our consulting services. Our broad industry experience and expertise, combined with in-house developers, results in solutions that are practical and meet real industry needs. These solutions are designed to be “right-sized” for you – configured to meet your current needs and budget, and then grow with your process and data availability over time. We also continually evolve our offerings based on market feedback and observations from our product and consulting staff.

BUILDING ON DR^x WEATHER GUARD'S PROVEN PLATFORM

DR^x FireGuard builds on the mature technical foundation of ISL Analytics' **DR^x Weather Guard application**, which has already demonstrated high-performance, localized forecasting for storm-driven outages.

This proven backbone provides robust weather data ingestion, machine learning-based prediction, and GIS-driven visualization.

- Built on DR^x's flexible, modular platform.
- Ingests 4–5 real-time forecast feeds (XWeather, HRRR, NOAA, Weather.com, etc.) every 15 minutes.
- Dynamically reweights models based on recent forecast accuracy.
- Leverages existing GIS, vegetation, and asset-layer integration to identify T&D network weather vulnerabilities.
- Runs and re-runs localized outage / Ignition predictions hourly, using real-time asset and environmental data.



THESE CAPABILITIES PROVIDE A STRONG FOUNDATION FOR:

- Wildfire-specific wind and humidity tracking.
- Key Fire risk metrics - Fosberg Fire Weather Index, Firebrand Ignition Probability, etc.
- Near-real-time PSPS modeling and recalibration.
- Seamless GIS integration with utility asset data to optimize hardening strategies.
- Optimized "smart" post-PSPS circuit and segment restoration.

DR^x FireGuard Will Address a Number of Key Gaps / Needs in the Risk Based, 7 Domain Wildfire Risk Mitigation Model Used by Many / Most West Coast Utilities Today.

The full scope of these capabilities is extensive and complex. Most utilities already have partial solutions but are aware of gaps.

We have identified significant gaps in each of these 7 domains, with the highest 2 priorities placed on Event Readiness (Optimum PSPS Footprint) and “Smart” Restoration.



WHY DR^x FIREGUARD VS OTHER OPTIONS?

DR^x FireGuard enhances Wildfire Event Readiness with optimized PSPS decision-making and “Smart” Restoration with core differentiators vs other vendor offerings:

-  Foundation built on **asset risk and vulnerability**, allowing credible asset failure risk to drive probabilities,
-  Proven 80%+ accuracy in **weather & damage forecasting** capability,
-  **Agnostic on sources of fire spread** modeling,
-  **Integration** with work order systems **to enable action, not just insight**,
-  **Affordable** for all sizes of utilities: lower cost, low risk pilot implementation approach
-  **AI will speed analysis / identification** of issues, options, trade-offs and optimum solutions



MODULE 1

WILDFIRE EVENT READINESS

At the core of **DR^x FireGuard** within our **Wildfire Event Readiness** module is an optimization engine that **uses spatial analysis to refine PSPS zones based on real-time risk data**. This engine overlays high-risk weather zones on utility infrastructure to isolate the minimal set of circuits or parts thereof requiring de-energization.



Overlays utility infrastructure and projected asset vulnerabilities to identify circuits and substations within **danger zones**.



Uses weather such as wind threshold projections (e.g., 25+ mph) from multiple forecast sources to generate high-risk weather zones.



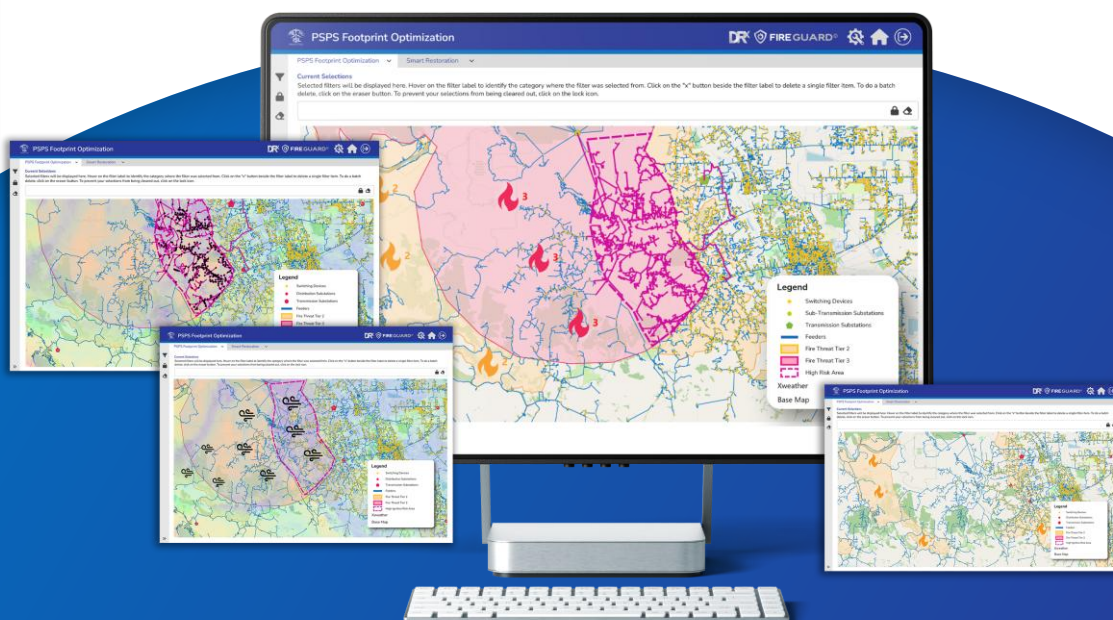
Runs a circuit tracing model to **find upstream interruption devices capable of isolating power to high-risk areas**.

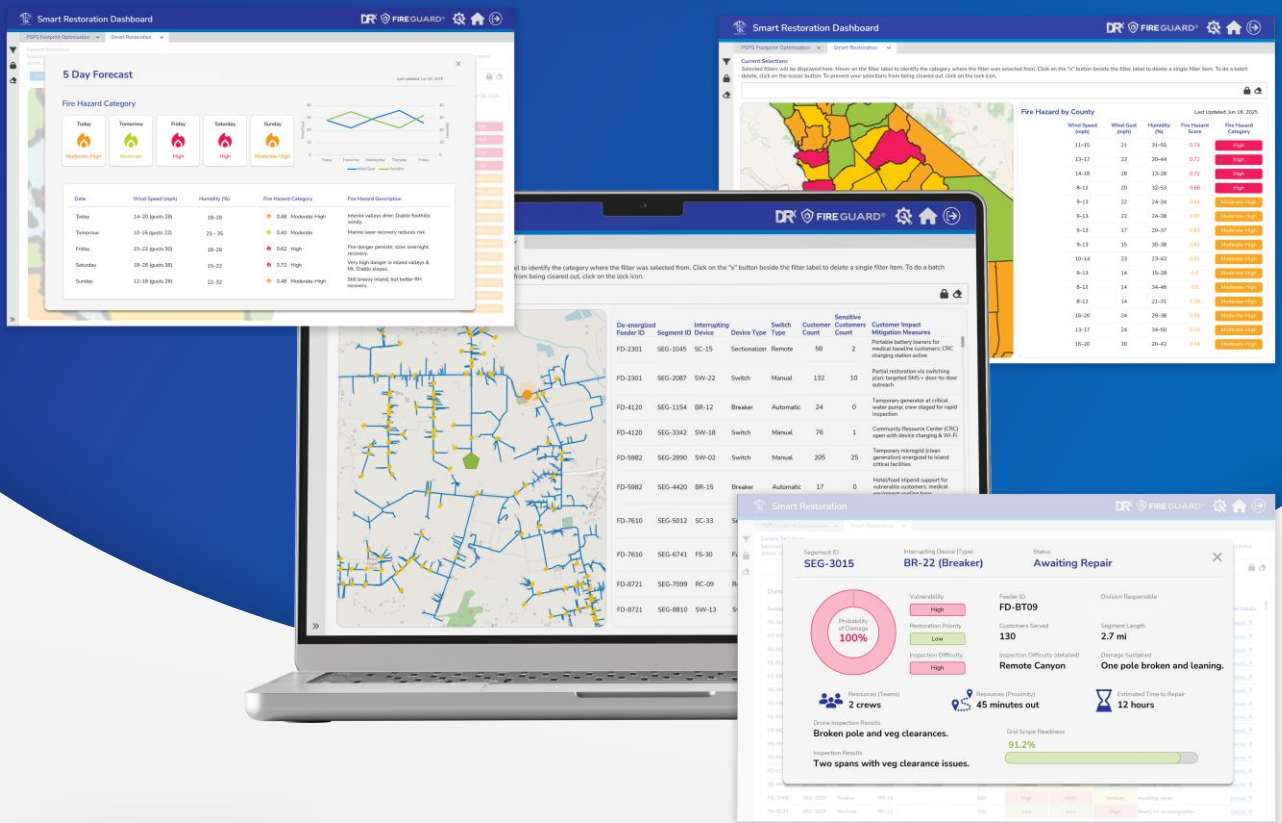


Incorporates **optimization logic to balance risk reduction vs. customer disruption**: *"What's the smallest area we can de-energize to eliminate 90% of risk?"*



Recalculates dynamically as weather forecasts evolve.





MODULE 2 “SMART” RESTORATION

The platform supports **dynamic re-energization planning**, projects safe restoration windows and resource needs, and provides **scenario analysis and comprehensive documentation** to defend decisions with regulators and stakeholders.

Post-event re-energization depends on efficient inspection workflows. **DRx FireGuard will centralize inspection status** from sensors, drone/satellite imagery, and field reports to **prioritize safe, phased restoration**.



Faster, More Confident PSPS Restorations

Decision support + re-energization forecasting for reduced duration and uncertainty.



Targeted Field Operations

Prioritize patrols/inspections and restoration sequencing where risk is lowest and customer impact highest.

Roadmap for DR^x FireGuard Future Development

DR^x FireGuard will be developed over three focused phases.

We are actively seeking pilot utility partners to help fund, guide and test each feature set.

Phase 1 Q4 2025

- PSPS zone/shape-file generator based on real-time weather forecast integration
- Circuit tracing engine & shutoff isolation logic
- Initial risk model ingestion and asset overlay with GIS visualization

Phase 2 Q2 2026

- PSPS Footprint Optimization Engine
- Weather Trend dashboards and historical forecast and history comparisons
- Community dashboard
Town-specific risk scoring logic/ML Modeling

Phase 3 Q3 2026

- Damage Risk assessment
- Smart restoration and prioritized inspection activities
- Real-time inspection tracking and reporting
- Smart Drone and satellite-based inspection workflows
- Real-time sensor fusion and triage AI with visual restoration tracker
- Full restoration compliance and Post-event analytics and reporting tools

Getting Involved ...

PARTICIPATION OPTIONS

PREFERRED OPTION

Participate in Pilot / PoC (Low Cost)



Drive Feature Direction

Shape how FireGuard evolves to meet real wildfire mitigation and PSPS operational needs.

Provide Domain Feedback

Direct collaboration with the FireGuard product team and wildfire analytics specialists.

Collaborative Testing

Apply FireGuard tools within your environment; contribute insights that improve model accuracy.

Ability to Select Focus Module(s)

Choose between *Event Readiness* and/or *Smart Restoration* during the pilot phase to align with your operational priorities.

4 Months of Platform Access

During wildfire season to evaluate live forecasting and event readiness tools.

Attractive First-Mover Pricing

With early-adopter incentives and SaaS credit for pilot contributions.

Low-Cost, Low-Risk Entry

6–9-month structured engagement leveraging ISL Analytics' existing Weather Guard application foundation.

Visibility & Recognition

Be featured as a founding FireGuard partner.

Be Part of Design Review Committee



Participate in **monthly design workshops** providing directional input and user experience feedback.

Access to **concept previews and prototypes** ahead of pilot testing.

Collaborate and network with wildfire mitigation peers from other utilities and agencies.

Opportunity to influence product usability and standards without data or funding commitments.

Contribute Data for Initial Modeling



Provide limited **GIS, outage history, and/or inspection datasets** to strengthen model validation.

Early exposure to FireGuard's AI model calibration results (ignition probability, PSPS optimization).

No system integration required; use secure, single-use data contribution agreements.

Contribute R&D Funding



Co-fund **shared research** to accelerate FireGuard's delivery as an affordable wildfire mitigation platform for all utilities.

"Rising tide lifts all ships" help enable scalable, low-cost deployment for smaller and mid-size utilities.

Gain **priority access** to supporting materials and preview early feature releases.

Eligible for **credit toward future SaaS subscriptions or licensing fees.**

Join us in shaping
DR^x FIREGUARD -
THE FUTURE OF WILDFIRE
OPERATIONS INTELLIGENCE



As wildfires intensify, ISL Analytics is taking action through developing DR^x FireGuard, a solution designed to fill a critical gap in wildfire risk reduction. By supporting smaller utilities and strengthening resilience across the grid, we move closer to a safer, more connected future for all.

Contact us for more information or a demonstration

www.islanalytics.com

info@islanalytics.com

+1.702.724.2683

